Greatest Of All Times

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Globally selected
PERSONALITIES

It's a never ending battle of making your cars better and also trying to be better yourself.

-KARL BENZ







25 Nov 1844 <::><::> 4 Apl 1929

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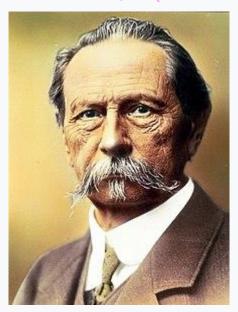
25 Nov 1844



4 Apl 1929 Father of the Automobile Industry

https://en.wikipedia.org/wiki/Carl_Benz

Carl Benz



Born Karl Friedrich Michael Vaillant

25 November 1844

Mühlburg, Baden, German

Confederation

(now Karlsruhe, Baden-Württemberg,

Germany)

Died 4 April 1929 (aged 84)

Ladenburg, Baden, Weimar Republic

Resting place

Cemetery of Ladenburg

Education University of Karlsruhe

Occupation Engineer

Spouse Bertha Ringer

(m. 1872)

Children 5

Engineering career

Projects Founded Fabrik für Maschinen zur Blechbearbeitung, Gasmotorenfabrik in Mannheim A. G., Benz & Cie.

Significant Benz Patent-Motorwagen design

Significant Automobile

advance

Signature

A. E. Bens

Carl (or Karl) Friedrich Benz (German: [kasl 'fsi:dsic 'bents] (bents); born Karl Friedrich Michael Vaillant; 25 November 1844 - 4 April 1929) was a German engine designer and automotive engineer. His Benz Patent-Motorwagen from 1885 is considered the first practical modern automobile and first car put into series production. He received a patent for the motorcar in 1886, the same year he first publicly drove the Benz Patent-Motorwagen.

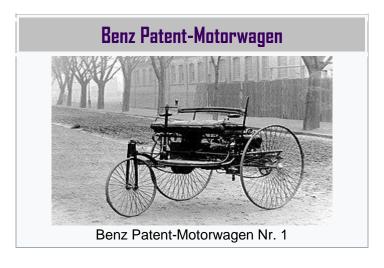
His company <u>Benz & Cie.</u>, based in <u>Mannheim</u>, was the world's first automobile plant and largest of its day. In 1926, it merged with <u>Daimler Motoren Gesellschaft</u> to form <u>Daimler-Benz</u>, which produces the <u>Mercedes-Benz</u> among other brands.

Benz is widely regarded as "the father of the car", as well as the "father of the automobile industry".

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Benz Patent-Motorwagen

https://en.wikipedia.org/wiki/Benz_Patent-Motorwagen



Overview				
Manufacturer	Rheinische Gasmotorenfabrik Benz & Cie. (known today as Mercedes-Benz)			
Production	1886–1893			
Powertrain				
<u>Engine</u>	1.0 L (954 cc) single cylinder engine ⅓hp (<u>Ligroin</u> fuel)			
Chronology				
Successor	Benz Velo			

The **Benz Patent-Motorwagen** ("patent motorcar"), built in 1885 by the German Karl Benz, is widely regarded as the first practical modern automobile and was the first car put into production. It was patented in January 1886 and unveiled in public later that year. The original cost of the vehicle was 600 imperial German marks, approximately 150 US dollars (equivalent to \$5,100 in 2023).

Two years after Karl Benz drove the car in public in July 1886,^[10] Karl's wife Bertha demonstrated its feasibility in a trip from Mannheim to Pforzheim in August 1888. Around the same time, the Patent-Motorwagen became the first commercially available automobile in history. Émile Roger, who made Benz engines under license in France, was one of the first persons to buy Benz' car; from 1888, Roger was also the salesperson of the Benz Patent-Motorwagen in France, selling one to Émile Levassor in 1888. The Patent-Motorwagen was shown at an exhibition in Munich in 1888, winning a gold medal, and at the 1889 Paris Exposition.

Due to the creation of the Patent-Motorwagen, Karl Benz has been hailed as the father and inventor of the automobile.

Development, specifications and Karl Benz's first drive



Benz Patent-Motorwagen Nr. 1 used in Karl Benz's first trip on 3 July 1886



The Benz Patent-Motorwagen Nr. 3 of 1888, used by Bertha Benz for the first long-distance journey by automobile (106 km (66 mi) long)

After developing a successful gasoline-powered two-stroke piston engine in 1873, Benz focused on developing a motorized vehicle while maintaining a career as a designer and manufacturer of stationary engines and their associated parts.

The Benz Patent-Motorwagen was a motor tricycle with a rear-mounted engine. The vehicle contained many new inventions. It was constructed of steel tubing with woodwork panels. The steel-spoked wheels and solid rubber tires were Benz's own design. Steering was by way of a toothed rack that pivoted the unsprung front wheel. Fully elliptic springs were used at the back along with a beam axle and chain drive on both sides. A simple belt system served as a single-speed transmission, varying torque between an open disc and drive disc.

The first Motorwagen used the Benz 954 cc (58.2 cu in) single-cylinder fourstroke engine with trembler coil ignition. [16] This new engine produced 500 watts (2/3 hp) at 250 rpm in the Patent-Motorwagen, although later tests by the University of Mannheim showed it to be capable of 670 W (0.9 hp) at 400 rpm. It was an extremely light engine for the time, weighing about 100 kg (220 lb). Although its open crankcase and drip oiling system would be alien to a modern mechanic, its use of a pushrodoperated poppet valve for exhaust would quite familiar. horizontal flywheel stabilized the single-cylinder engine's power evaporative carburettor was controlled by a sleeve valve to regulate power and engine speed. The first model of the Motorwagen had not been built with a carburettor, rather a basin of fuel soaked fibers that supplied fuel to the cylinder by evaporation. [citation needed]

The vehicle was awarded the German patent number 37435, for which Karl Benz applied on 29 January 1886. Following official procedures, the date of the application became the patent date for the invention once the patent was granted, which occurred in November of that year. Benz unveiled his invention to the public on 3 July 1886, on the Ringstrasse in Mannheim. For the first time Karl Benz publicly drove the car on July 3, 1886, in Mannheim at a top speed of 16 km/h (10 mph).^[10]

Benz later made more models of the Motorwagen: model number 2 had 1.1 kW (1.5 hp) engine, and model number 3 had 1.5 kW (2 hp) engine, allowing the vehicle to reach a maximum speed of approximately 16 km/h (10 mph). The chassis was improved in 1887 with the introduction of wooden-spoke wheels, a fuel tank, and a manual leather shoe brake on the rear wheels. [citation needed]

About 25 Patent-Motorwagen were built between 1886 and 1894.[17]

<u>Bertha Benz</u>

https://en.wikipedia.org/wiki/Bertha_Benz#First_ cross-country_automobile_journey,_1888

Bertha Benz (German: [besta bents]; née Cäcilie Bertha Ringer; 3 May 1849 – 5 May 1944) was a German automotive pioneer. She was the business partner, investor and wife of automobile inventor Carl Benz. On 5 August 1888, she was the first person to drive an internal-combustion-engined automobile over a long distance, field testing the Benz Patent-Motorwagen, inventing brake lining and solving several practical issues during the journey of 105 km (65 miles). In doing so, she brought the Patent-Motorwagen worldwide attention and got their company its first sales. Bertha Benz was

not allowed to study in the <u>Grand Duchy of Baden</u>, and her financial and practical engineering contributions have long been overlooked until the 21st century.

Bertha Benz



Bertha Ringer, c. 1871, prior to her marriage to <u>Carl</u>
<u>Benz</u>

Born Cäcilie Bertha Ringer

3 May 1849

<u>Pforzheim, Grand Duchy of</u> <u>Baden, German Confederation</u>

Died 5 May 1944 (aged 95)

Ladenburg, Greater German Reich

Nationality German

Known for First person in history to drive

an automobile over a long distance

Spouse <u>Carl Benz</u>

(m. 1872; died 1929)

Children 5

Early life and education



Bertha Benz at age 18, c. 1867

Cäcilie Bertha Ringer was born on 3 May 1849 to a wealthy carpenter family in <u>Pforzheim</u>. She was the third of nine children. Her father, Karl Friedrich Ringer, a master builder and carpenter, and her 20 year younger mother, Auguste Friedrich, were wealthy individuals who invested heavily in their children's educations. in Pforzheim in the <u>Grand Duchy of Baden</u>. Her father became wealthy by speculating with real estate. She attended a boarding school in Pforzheim for 10 years and was known for her ambition and fascination with technological <u>innovation</u>, but could not pursue higher education, as women were not allowed to attend university at the time.

On 27 June 1869, during an excursion by the Eintracht Club, she met and fell in love with machine lover and tinkerer <u>Carl Benz</u>, who was five years her senior and penniless, but had a head full of crazy ideas, and who could talk better about technology than about feelings. In 1870, two years before her marriage, she used part of her <u>dowry</u> to invest in his failing iron construction company. As an unmarried woman, she was able to do so; after she married Benz, according to German law, Bertha lost her legal power to act as an investor.

Adult life

On 20 July 1872, Bertha Ringer married Karl Benz.

Thanks to her premarital financial support, Karl Benz moved on from his failing iron construction company to a new manufacturing venture, Benz & Cie, continuing to use her dowry as financial support, to pursue his lifelong dream of the first true automobile. In 1875/76, when Bertha was pregnant with her third child, the bailiff had their workshop emptied, because they could no longer pay their debts. But they continued and on New Year's Eve 1879, the two were able to get a two-stroke engine to work for the first time. Eventually, in December 1885, they finished work on the first horseless carriage, 13 years into their marriage. Karl Benz applied for the patent, but Bertha could not legally apply alongside him despite her financial and practical engineering contributions.

With cutting-edge <u>bicycle</u> constructions, the Model I <u>Patent-Motorwagen</u> was the original Patent Motor Car and the world's first automobile. The Model II was converted to a four-wheeler for test purposes, making it the only one of this model. On 3 July 1886, Karl Benz presented the <u>Patent-Motorwagen</u> automobile to the public in <u>Mannheim</u>. It had powered rear wheels with a ringed steel and solid rubber, steerable front wheel and optional seat arrangements and a folding top. Karl Benz was a poor marketer and faced

competition by <u>Gottlieb Daimler</u>, which prompted his wife to undertake the test drive in 1888.



Bertha Benz Memorial Route, with pins indicating various
events along her journey (click to expand and click pins for information).
The South portion of the Route is in blue, the North portion in red,
and the green portion is the Historical section of the route
which more closely matches her original journey



Carl and Bertha Benz 1925

On 5 August 1888, 39-year-old Bertha Benz drove from <u>Mannheim</u> to <u>Pforzheim</u> with her sons Richard and Eugen, thirteen and fifteen years old respectively, in a Model III, without telling her husband and without permission of the authorities, thus becoming the first person to drive an automobile a significant distance. Before this historic trip, motorized drives were merely very short trials, returning to the point of origin, made with

assistance of mechanics. Following wagon tracks, this pioneering tour covered a one-way distance of about 106 km (66 mi).

Although the ostensible purpose of the trip was to visit her mother, Bertha Benz had other motives — to prove to her husband, who had failed to adequately consider marketing his invention, that the automobile in which they both had heavily invested would become a financial success once it was shown to be useful to the general public; and to give her husband the confidence that his constructions had a future.

She left Mannheim around dawn, solving numerous problems along the way. Bertha demonstrated her significant technical capabilities on this journey. With no fuel tank and only a 4.5-litre supply of petrol in the <u>carburetor</u>, she had to find <u>ligroin</u>, the petroleum solvent needed for the car to run. The solvent was only available at <u>apothecary</u> shops, so she stopped in <u>Wiesloch</u> at the city <u>pharmacy</u>, <u>Stadt-Apotheke</u>, to purchase the fuel. At the time, petrol and other fuels could only be bought from chemists [pharmacists in US English], and so this is how the chemist in Wiesloch became the first fuel station in the world.

She cleaned a blocked fuel line with her hat pin and used her <u>garter</u> as insulation material. A <u>blacksmith</u> had to help mend a chain at one point. When the wooden brakes began to fail, Benz visited a cobbler to install leather, making the world's first pair of <u>brake linings</u>. An <u>evaporative cooling system</u> was employed to cool the engine, making water supply a big worry along the trip. The trio added water to their supply every time they stopped. The car's two gears were not enough to surmount uphill inclines and Eugen and Richard often had to push the vehicle up steep roads. Benz reached Pforzheim somewhat after dusk, notifying her husband of her successful journey by telegram. She drove back to Mannheim several days later.

The trip was officially forbidden and Benz risked a penalty. There were no suitable roads and signs, only a few signposts. It was life-threatening because of the fragility of the car and the road conditions. The wagon was three-wheeled, but the paths were driven by four-wheeled horse-drawn carriages, so the dainty front wheel rattled over tufts of grass, sticks and stones.

The trip received a great deal of publicity, as she had sought, and was a key event in the technical development of the automobile. She reported everything that had happened along the way and made important suggestions, such as the introduction of an additional gear for climbing hills and brake linings to improve brake-power. The pioneering couple introduced several improvements after Bertha's experiences. Her trip demonstrated to the burgeoning automotive industry that test drives were essential to their business.

Personal life and death

On 20 July 1872, Bertha Ringer married Karl Benz. Together they had five children: Eugen (1873–1958), Richard (1874–1955), Clara (1876–1968), Thilde (1882–1974), and Ellen (1890–1973).

The Mannheimer Morgen quoted Bertha as "enterprising mother of five [who] led a strict regime. Carl Benz is described by contemporary witnesses as a "serious and just person", while his wife is said to have had an "aggressive nature".

Bertha Benz died at age 95 in her village in Ladenburg on 5 May 1944.



Last home of Karl and Bertha Benz, now the location of the Daimler and Benz Foundation in Ladenburg, Baden-Württemberg

Posthumous honours, 21st century



Official signpost of Bertha_Benz_Memorial_Route



Bertha Benz monument in <u>Wiesloch</u>, where she made a stop to take in fuel at the city pharmacy, which is now dubbed "the first filling station in the world"

In 2008, the <u>Bertha Benz Memorial Route^[22]</u> was officially approved as a route of the industrial heritage of humankind, because it follows Bertha Benz's path during the world's first long-distance journey by automobile in 1888. Now it is possible to follow the 194 km of signs indicating her route from <u>Mannheim</u> via <u>Heidelberg</u> to <u>Pforzheim</u> (<u>Black Forest</u>) and back.^[23]

The *Bertha Benz Challenge*, embedded in the framework of the ceremony of *Automobile Summer 2011*, the big official German event and birthday party commemorating the invention of the automobile by Carl Benz over 136 years ago, took place on Bertha Benz Memorial Route on 10 and 11 September 2011. It was a globally visible signal for new automobile breakthroughs, and was only open for sustainable mobility – future-oriented vehicles with alternative drive systems, *i.e.*, hybrid and electric, hydrogen and fuel cell vehicles, and other extremely economical vehicles. The motto is *Bertha Benz Challenge – Sustainable Mobility on the World's Oldest Automobile Road!*[24][25]

On 25 January 2011, <u>Deutsche Welle</u> (DW-TV) broadcast worldwide in its series, *Made in Germany*, a TV documentary on the invention of the automobile by Carl Benz, highlighting the very important role of his wife, Bertha Benz. The report is not only on the history of the automobile, but took a look at its future, shown by the Bertha Benz Challenge on 10 and 11 September 2011.

The 2011 documentary *The Car is Born*, produced by <u>Ulli Kampelmann</u>, centered on the first road trip by Bertha Benz.

In 2016, she was inducted into the <u>Automotive Hall of Fame</u>, 42 years after her husband was inducted.

In honour of <u>International Women's Day</u> in 2019, the modern <u>Daimler</u> company commissioned a four-minute advertisement dramatizing portions of Bertha Benz' 1888 journey. The ad was created by Berlin-based ad agency Antoni (the lead European agency for Mercedes-Benz), and directed by <u>Sebastian Strasser</u> via his production company, Anorak Film.

The Benz home has been designated as historic and is used as a scientific meeting facility for a nonprofit foundation, the Daimler and Benz Foundation, which aims to promote science and research in order to gain a better understanding of the correlation between man, the environment and technology.

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List of Mercedes-Benz vehicles

https://en.wikipedia.org/wiki/List_of_Mercedes-Benz_vehicles

The following is a list of vehicles produced by <u>Mercedes-Benz Group</u> (formerly Daimler-Benz) and their successors, ordered by year of introduction.

Kindly visit these Web Links for the Detailed information & photographs of the vehicles

01] List of Mercedes-Benz vehicles

https://en.wikipedia.org/wiki/List_of_Mercedes-Benz_vehicles

02] Benz Patent-Motorwagen

https://en.wikipedia.org/wiki/Benz_Patent-Motorwagen

03] List of motorcycles of the 1890s

https://en.wikipedia.org/wiki/List_of_motorcycles_of_the_1890s

04] List of motorized trikes

https://en.wikipedia.org/wiki/List_of_motorized_trikes

051 Bertha Benz

https://en.wikipedia.org/wiki/Bertha_Benz#First_crosscountry_automobile_journey,_1888

Timeline of motorized bicycle history

https://en.wikipedia.org/wiki/Timeline_of_motorized_bicycle_history

This timeline of motorized bicycle history is a summary of the major events in the development and use of motorized bicycles and tricycles, which are defined as pedal cycles with motor assistance but which can be powered by pedals alone.

19th century

- 1867–1869 The first steam driven two wheeled vehicle is the <u>Michaux-Perreaux steam</u> velocipede created in France.
- 1869 <u>Sylvester H. Roper</u> of Massachusetts, USA creates a <u>steam velocipede</u> which he shows at fairs and circuses.
- 1885 <u>Gottlieb Daimler</u> and <u>Wilhelm Maybach</u> of Cannstatt, Germany put their newly developed "grandfather clock" engine in a two-wheeled frame to demonstrate their automobile engine. The <u>Daimler Reitwagen</u> is the first <u>internal combustion</u> motorcycle.
- 1896 Roy C. Marks of San Francisco produces the first motorcycle made in the USA. It becomes the California Motorcycle.
- 1897 Most likely the first <u>electric bicycle</u> was built in 1897 by Hosea W. Libbey.
- 1897 The <u>Werner Brothers</u> of France developed a motorized bicycle with a De Dion-Bouton engine mounted above the front wheel.
- 1898 Laurin and Klement produce the Slavia model A moto cycle. It is a purpose-built motorcycle.
- 1900 Due to poor handling Werner move the engine to the bottom of the frame and patent the design. The 1900 Werner is the first motorcycle layout.
- 1900 The Singer Motor Wheel was a wheel attached to a small internal combustion engine that would be substituted for the front wheel of a bicycle, motorizing it

20th century

- 1903 A <u>California</u> motorized bicycle ridden by George Wyman became the first motor vehicle to cross the North American continent.
- 1903 1962 The "Shaw Manufacturing Co." () of <u>Galesburg, Kansas</u> advertises a 241cc chain-drive engine kit (1903–1915) for motorizing a bicycle in "Popular Mechanics" magazine for \$90.
- 1914 The Smith Motor Wheel was introduced, similar in concept to the Singer, but was designed to be fixed to the rear of the bicycle, rather than to replace the front wheel. The design was later picked up by Briggs & Stratton.
- 1918 Evans Power Cycle
- 1919 Johnson Motor Wheel
- 1938 Fichtel & Sachs-Werke Germany introduced the (Brennabor) Saxonette, a hubdriven bicycle. 60 ccm, 1.2 HP, max. speed 30 km/h. The engine was licensed to: Anker, Bismarck, Elfa, Excelsior, Gold-Rad, Hecker, Meister, Panther, Presto, Urania, Victoria and Wanderer. The inventor was Mr. Goldeband who gave the patents to F & S.
- 1939 The bolt-on <u>Whizzer</u> bike motor is introduced; production continues until 1962. In Australia, the <u>Autocycle Malvern Star</u> was introduced, following the pattern of the British <u>Autocycle</u>

- 1946 In Italy, Vincenti Piatti had designed a 50cc engine unit for driving portable lathes and also foresaw the possibilities of this engine power-assisting a bicycle the *Mini Motore*.
- 1946 The initial iteration of the <u>VéloSoleX</u> motorized bicycle is introduced to the French Public.
- 1948 The **Trojan Minimotor** begins production in Britain and becomes immediately popular.
- 1949 The *Mobylette* is introduced in France. Its concept was "a bicycle with a nice permanent back wind". This pattern gave its name to the French slang term for moped. 30 million copies were produced until 2002, evolving much through different models during half a century.
- 1950 The British-made **Cyclaid** 31cc bolt on bicycle motor is introduced. This same year also sees the introduction of the popular **Cyclemaster** motor wheel, also made in Britain from a design by the German DKW company.
- 1952 The 18cc German **Lohmann** is one of the few semi-diesel bike motors ever produced and is claimed to be the world's smallest bike motor.
- 1966 The **Vélosolex 3800** is introduced and becomes the most popular version of the Vélosolex motorized bicycle, production continues until 1988.
- 1968 The <u>Honda P50</u> the last vehicle to incorporate a motor wheel as a power unit is discontinued.
- 1975 <u>Sears</u> begins selling the <u>Tanaka</u> **Bike Bug** motor under its own *Free Spirit* brand name; U.S. sales of the Bike Bug continue until 1985.
- 1982 The "Bumble Bike" friction drive (now Golden Eagle belt drive) is chosen as "Official Transportation" at the Knoxville Worlds Fair.
- 1985 The <u>Tour de Sol</u> leads to the development of modern electric bicycles in Switzerland.
- 1986 A group of Swiss students develops the <u>Twike sociable</u> tricycle. The prototype was purely human-powered, but all 850 production vehicles were <u>human-electric hybrids</u>.
- 2000 Honda Step Compo, first <u>folding electric bicycle</u>.

21st century

- 2001 the <u>Hudspith Steam Bicycle</u> makes its public debut at the <u>Great Dorset Steam</u> Fair.
- 2003 Rif Addams(Sean Patrick Brown b. 1969) re-enacts George Wyman's 1903 San Francisco to New York run, on a custom-built Whizzer.
- 2006 Motorized bicycling enjoys a resurgence in popularity, both as hobby and serious alternative transportation.
- 2006 Motorized bicycle racing began in Tucson, Arizona with Death Race
- 2008 The first "National" rally in the US, specifically for Motor-Assisted-Bicycles, took place in Ocean Park WA. There were 29 bikes, of various styles, representing 4 states.
- 2008 A motorized bicycle ridden by Augie Deabler is accepted as an official entrant at the Bonneville Salt Flats "World of Speed '08." He used a Golden Eagle/Tanaka 32cc, and recorded a top speed in the standing mile of 32.4MPH.
- 2011 Motorized Bicycle racing began in Southern California at the Willow Springs International Motorsports Park Go Kart track in Rosamond, CA on June 18, 2011. SoCal Motor Bicycle Racing continues to hold races in Southern California at Grange Motor Circuit in Apple Valley, California after the first race on October 20, 2011, and at Willow Springs International Motorsports Park.
- 2020 Ufeel supercapacitor electric bicycle without battery introduced.



https://group.mercedes-benz.com/company/tradition/company-history/1885-1886.html

The first stationary gasoline engine developed by Carl Benz was a one-cylinder two-stroke unit which ran for the first time on New Year's Eve 1879. Benz had so much commercial success with this engine that he was able to devote more time to his dream of creating a lightweight car powered by a gasoline engine, in which the chassis and engine formed a single unit.

The major features of the two-seater vehicle, which was completed in 1885, were the compact high-speed single-cylinder four-stroke engine installed horizontally at the rear, the tubular steel frame, the differential and three wire-spoked wheels. The engine output was 0.75 hp (0.55 kW). Details included an automatic intake slide, a controlled exhaust valve, high-voltage electrical vibrator ignition with spark plug, and water/thermo siphon evaporation cooling.

The first automobile

On January 29, 1886, Carl Benz applied for a patent for his "vehicle powered by a gas engine." The patent – number 37435 – may be regarded as the birth certificate of the automobile. In July 1886 the newspapers reported on the first public outing of the three-wheeled Benz Patent Motor Car, model no. 1.

Long-distance journey by Bertha Benz (1888)

Using an improved version and without her husband's knowledge, Benz's wife Bertha and their two sons Eugen (15) and Richard (14) embarked on the first long-distance journey in automotive history on an August day in 1888. The route included a few detours and took them from Mannheim to Pforzheim, her place of birth. With this journey of 180 kilometers including the return trip Bertha Benz demonstrated the practicality of the motor vehicle to the entire world. Without her daring – and that of her sons – and the decisive stimuli that resulted from it, the subsequent growth of Benz & Cie. in Mannheim to become the world's largest automobile plant of its day would have been unthinkable.



Bertha Benz and her sons Eugen and Richard during their long-distance journey in August 1888 with the Benz Patent Motor Car.

<u>Double-pivot steering, contra engine, planetary gear transmission (1891 – 1897)</u>

It was Carl Benz who had the double-pivot steering system patented in 1893, thereby solving one of the most urgent problems of the automobile. The first Benz with this steering system was the three-hp (2.2-kW) Victoria in 1893, of which slightly larger numbers with different bodies were built. The world's first production car with some 1200 units built was the Benz Velo of 1894, a lightweight, durable and inexpensive compact car.

1897 saw the development of the "twin engine" consisting of two horizontal single-cylinder units in parallel, however this proved unsatisfactory. It was immediately followed by a better design, the "contra engine" in which the cylinders were arranged opposite each other. This was the birth of the horizontally-opposed piston engine. Always installed at the rear by Benz until 1900, this unit generated up to 16 hp (12 kW) in various versions.



Double-pivot steering, contra engine, planetary gear transmission (1891 – 1897)

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Automotive Hall of Fame

https://www.automotivehalloffame.org/

Honoring the Past and Shaping the Future

The Automotive Hall of Fame was established in 1939, to perpetuate the accomplishments of the early automotive pioneers. Called the "Automobile Old Timers," the group was dedicated to honoring automotive innovators from all parts of the worldwide automotive industry.

The current mission of the Automotive Hall of Fame is to honor and celebrate the accomplishments of individuals in the international motor vehicle industry through awards and educational programs that challenge young and old alike to higher levels of personal achievement.

The Automotive Hall of Fame's mandate is to increase the public's understanding of the contribution that the international motor vehicle industry has had on our freedom of personal mobility and on our high standard of living. In the process of preserving international motor vehicle industry history, the Automotive Hall of Fame is dedicated to shaping a better future for all.

The Hall of Fame tells stories about the people, their companies and how the industry has impacted culture, society, pop culture, the world in general.

HALL HISTORY

At the Automotive Hall of Fame, nestled in the heart of Dearborn, Michigan, we proudly celebrate the visionaries and trailblazers who have shaped the automotive industry. Our journey began in 1939 as we committed to preserving the legacies of early automotive pioneers. Over the decades, we evolved into the Automotive Hall of Fame, expanding our mission to honor innovators, inventors, and influential figures from every corner of the automotive world.

We officially opened our doors in 1997, and since then, we have awarded over 800 remarkable individuals who have left an indelible mark on the industry. Automotive

legends grace our halls, their stories inspiring countless visitors. Our museum offers a rich tapestry of exhibits, showcasing classic cars, historical documents, and interactive displays that bring the history of automotive innovation to life.

Through our educational programs and events, we strive to inspire future generations, celebrating the past while driving towards a future of endless possibilities on the road. We are more than a museum; we are a living testament to the spirit of innovation and excellence that drives the automotive industry forward.

We're within the MotorCities National Heritage Area, an affiliate of the National Park Service dedicated to preserving and promoting the automotive and labor heritage of Michigan.

National Heritage Areas are places where natural, cultural, historic, and scenic resources combine to form a cohesive, nationally important landscape.

Hall of Fame Timeline

1939

The Automobile Old Timers organization is launched in October at the Lexington Hotel in Manhattan with the mission to perpetuate the memories of the early auto pioneers.

1940

AOT awards its first Distinguished Service Award to honor automotive people from all parts of the worldwide automotive industry.

1946

The Automobile Old Timers adopt new goals to promote safety on highways and streets, preserve automotive history and emphasize education through increased cooperation with museums and universities, and present citations to distinguished individuals in the automobile industry and highway transport.

1957

Automobile Old Timers becomes the "Automotive" Old Timers to include the inventors, engineers, stylists, manufacturers, dealers and "all others whose combined talents keep America awheel."

1960

AOT moves their national headquarters to the NADA Building in Washington, D.C, imagining the establishment of an Automotive Hall of Fame and Museum in the nation's capital.

1967

Walter P. Chrysler, Henry Ford, Charles Kettering and Alfred P. Sloan become the first individuals to receive the Induction Award and be inducted into the Automotive Hall of Fame.

1971

AOT reorganizes, changing their name to "Automotive Organization Team" to more wholly represent the people of the industry and to appeal to a younger generation of upand-coming leaders. In May, Northwood University in Midland, Michigan, becomes the new home of the Automotive Organization Team.

1976

The first permanent Hall of Fame building is dedicated at Northwood University on October 29.

1981

The first Young Leader & Excellence Award was presented. This award reflected the Automotive Hall of Fame's commitment to the future of the motor vehicle industry.

1982

The Automotive Organization Team officially changes their name to the Automotive Hall of Fame to fit the institutional mission.

1984

The Industry Leader of the Year Award is first presented. The award is nominated and awarded only by the Board of Directors.

1996

The construction site of a new Hall of Fame building in Dearborn, Michigan is dedicated as part of American Automobile Centennial Week.

1997

The new Automotive Hall of Fame facility is opened on August 16 in Dearborn, Michigan.

2014

The Automotive Hall of Fame celebrates its 75th Anniversary.

2019

The Automotive Hall of Fame celebrates its 80th Anniversary.

Inddction & Awards

The Automotive Hall of Fame honors and celebrates the accomplishments of individuals in the international motor vehicle industry through our awards program. Since its founding in 1939, the Hall has honored nearly 800 men and women worldwide.

Induction into the Automotive Hall of Fame is reserved for noteworthy individuals who created, shaped, and changed the automotive and mobility market. It is considered the single greatest honor in the automotive industry.

2024: Induction & Awards Ceremony September 19, 2024

Since our inception in 1939, the Automotive Hall of Fame has honored nearly 800 deserving men and women worldwide, and we look forward to continuing this tradition of excellence in 2024. The upcoming ceremony promises to be a momentous occasion as we continue our tradition of honoring and celebrating the exceptional achievements of individuals in the international automotive industry.

The 2024 Induction Ceremony was held on September 19, 2024 at Michigan Central Station in Detroit!

Take a look at the highlights!

Inductees

Dr. Betsy Ancker-Johnson

Johnson was a barrier breaker as the first woman VP in the automotive industry, hired in 1972 at General Motors. Johnson oversaw two of the industry's most controversial areas at the time: environmental compliance and vehicle safety. Johnson was an acclaimed

plasma physicist that was known for her research, numerous patents and impact on Automotive environmental and safety issues.

Vic Edelbrock, Sr. & Vic Edelbrock, Jr.

Vic Edelbrock Sr.'s pioneering spirit and innovative engineering defined the aftermarket sector, introducing high-performance components that revolutionized vehicle performance. Vic Edelbrock Jr.'s seamless continuation of this legacy and commitment to quality, innovation, and global expansion solidified the Edelbrock name as an enduring symbol of excellence, earning them both a place among the industry's most esteemed leaders.

William "Bill" Ford

Bill Ford has played a pivotal role advancing the industry while positioning an iconic, global, 120-year-old family company for the future. Since becoming executive chair 25 years ago, he has led Ford Motor Company through periods of change and uncertainty with a values-driven approach that demonstrates corporate responsibility and success can go hand in hand. He was an early and influential advocate for sustainability and environmental responsibility, a driving force behind mobility innovation, and continues to champion the revitalization of the Motor City.

John A. James

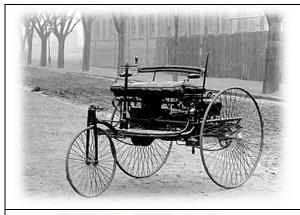
James opened the commercial trucking industry to minorities who had previously been excluded. After court battles and relentless advocacy, James was the first African American given the ability to transport goods within Michigan and across state lines. Today James Group International is an award winning logistics and automotive services leader.

Vivek Chaand Sehgal

As the visionary founder of Motherson Group, Sehgal's entrepreneurial spirit propelled the company from its inception to a global powerhouse, shaping the industry's landscape. His commitment to innovation, sustainable practices, and global collaboration has elevated his company and left an indelible mark on the automotive world.

Wendell Oliver Scott, Sr.

As the first African American to win a NASCAR Grand National (now Cup Series) race, Scott's triumph shattered racial barriers and opened doors for greater diversity in racing. His legacy of perseverance, innovative mechanical skills, and pioneering spirit serves as an inspiration to future generations and underscores his significant role in shaping the narrative of inclusion and progress within the automotive world.



Replica of the Benz Patent-Motorwagen built in 1885



Engine of the Benz Patent-Motorwagen



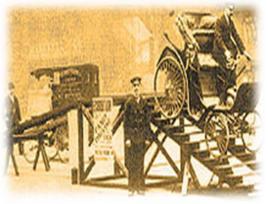
The Benz Patent-Motorwagen Number 3 of 1888, used by <u>Bertha Benz</u> for the first long-distance journey by automobile (more than 106 km or sixty miles)



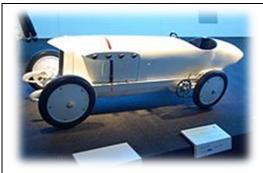
Benz introduced the Velo in 1894, becoming the first *large scale production* automobile.



First internal combustion-engined bus in history: the Benz Omnibus, built in 1895 for the Netphener bus company.



Benz "Velo" model presentation in London 1898



1909 *Blitzen Benz* – built by Benz & Cie., which held the land speed record



Logo with laurels used on Benz & Cie. automobiles after 1909



Logo on family held business production vehicles



Last home of Carl and Bertha Benz, now the location of the Gottlieb Daimler and Carl Benz Foundation in <u>Ladenburg</u>, in <u>Baden-</u>
Württemberg

Kindly visit these Web Links to see the Videos

01] Karl Benz: Father of the Automobile [21:21] https://www.youtube.com/watch?v=voXzQppLGuo

02] Story of the Father of Automobiles | Karl Benz [17:51] https://www.youtube.com/watch?v=_nWnr8kRjMQ

03] The FIRST IN 1886: Before Mercedes, there was Benz [11:32] https://www.youtube.com/watch?v=tlqUTeNWfms

04] Karl Benz to Mercedes: [32:24]

https://www.youtube.com/watch?v=3i40tLlk6Jk

05] How A Poor Boy Created Mercedes-Benz [24:26] https://www.youtube.com/watch?v=JFIEds4Rcao

Carl Benz School

https://www.carlbenzschool.kit.edu/cbs-history.php

The CBS is very proud to be named after Carl Benz, the inventor of the automobile. The school aims to educate bright engineers with an innovative mind-set to follow in his footsteps, by influencing the technological developments of tomorrow.

Carl Benz was born in 1844 in Karlsruhe, Germany. Despite the limited means of his family, his mother insisted upon providing him with a good technical education. Being a diligent student, Benz passed the entrance exam to study mechanical engineering at the Karlsruhe Institute of Technology, formerly Polytechnic College. He graduated in 1864 with a degree in Mechanical Engineering. During his years at the university, he had already started to envision concepts for a vehicle that would eventually become the horseless carriage.

Early business misfortunes did not prevent him from developing new types of engines and from patenting key engine components. These patents, among them the patent for the first internal combustion engine, soon led to substantial revenue increases. Carl Benz's true genius became obvious thanks to his successive inventions, registered whilst designing what would become the production standard for his two-stroke engine. After years of testing and modifications, Benz created the first commercial vehicle, the Model 3, an automobile with a four-stroke engine of his own design between the rear wheels. It was gasoline-powered, the power being transmitted by means of two roller chains to the rear axle with wooden wheels. This became the first production automobile.



In 2007 the Mechanical Engineering College of the KIT was formally given the brand name "Carl Benz School of Engineering." In a formal celebration, Dieter Zetsche (Chairman of the Management Board of Mercedes-Benz), Jutta Benz (great-granddaughter of Carl Benz) alongside the former president of the KIT Prof. Dr. Horst Hippler officially inaugurated the new school's name.















https://www.loc.gov/everyday-mysteries/motor-vehicles-aeronautics-astronautics/item/who-invented-the-automobile/

Below is a selection of highlights in automobile history, compiled from information in Leonard Bruno's book

Science and Technology Firsts

(Detroit, 1997) and Thought Co.'s

Automobile Highlights

Inventor	Date	Type/Description	Country
Nicolas-Joseph Cugnot (1725-1804)	1769	STEAM / Built the first self propelled road vehicle (military tractor) for the French army: three wheeled, 2.5 mph.	France
Robert Anderson	1832- 1839	ELECTRIC / Electric carriage.	Scotland
Karl Friedrich Benz (1844-1929)	1885/86	GASOLINE / Automobile powered by an internal combustion engine: three wheeled, four cycle, engine and chassis form a single unit.	Germany Patent DRP No. 37435
Gottlieb Wilhelm Daimler (1834-1900) and Wilhelm Maybach (1846-1929)	1886	GASOLINE / First four wheeled, four-stroke engine- known as the "Cannstatt-Daimler."	Germany
George Baldwin Selden (1846-1922)	1876/95	GASOLINE / Combined internal combustion engine with a carriage: patent no: 549,160 (1895). Never manufactured — Selden collected royalties.	United States
Charles Edgar Duryea (1862-1938) and his brother Frank (1870- 1967)	1893	GASOLINE / First successful gas powered car: 4hp, two-stroke motor. The Duryea brothers set up first American car manufacturing company.	United States

Related Websites

• <u>Automotive Industry: A Research Guide</u> (Library of Congress) - Resources for researchers interested in the automotive industry covering the history, company research, industry associations and more.

- <u>Automotive Hall of Fame Inductees External</u> Provides biographies of the many inventors who shaped the automobile industry from Karl Benz to Henry Ford.
- <u>Smithsonian Automobile Collection External</u> (Smithsonian Museum of American History)
 Features historical automobiles that are part of the Smithsonian Institution's collection.
- <u>History of the Automobile External</u> (ThoughtCo.) This website includes a pictorial timeline of automobiles, information on the invention of car components, and a discussion of who invented the car.
- <u>Timeline: History of the Electric Car</u> (Department of Energy) Explores the history of the electric car, starting in 1828

Further Reading

- Bruno, Leonard. "Transportation." In Science and technology firsts. Detroit, Gale, 1997: 499-534.
- Burness, Tad. *Ultimate auto album: an illustrated history of the automobile*. Iola, WI, Krause Publications. 2001. 503 p.
- Coffey, Frank. *America on wheels: the first 100 years: 1896-1996*. Los Angeles, General Publishing Group. 1998. 304 p.
- Colby, Jennifer. *Model T to self-driving cars : then to now tech.* Ann Arbor, MI, Cherry Lake Publishing. 2019. 24 p.
- Consumer guide auto editors. The American auto: over 100 years. Lincolnwood, IL, Publications International, Ltd. 2015. 704 p.
- Eckermann, Erik. *World history of the automobile*. Warrendale, PA, Society of Automotive Engineers. 2001. 371 p.
- Franz, Kathleen. *Tinkering: consumers reinvent the early automobile.* Philadelphia, PA, University of Pennsylvania Press. 2005. 224 p.
- Tumminelli, Paolo. *Car design America: myths, brands, people.* New York, teNeues Publishing Group. 2012. 391 p.

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Kindly visit the Web Links to see more than
140 Karl Benz Car Stock Photos and High-res Pictures
01]https://www.gettyimages.in/search/2/image?phrase=karl+benz+car
02] https://www.shutterstock.com/search/carl-benz

Kindly visit the Web Link to see the Movies: Carl & Bertha

[01] https://www.imdb.com/title/tt1753569/ [1:30]

[02] Carl Bertha Benz Film - Mercedes Daimler [1:28:59]

[03] https://www.imdb.com/title/tt1753569/plotsummary/

[04] https://watch.plex.tv/movie/carl-and-bertha

Memorials to Carl Benz

01] Dr Carl Benz Car Museum



The vehicle factory.

How proud the inhabitants of Ladenburg must have been when one man singlehandedly turned their town into a synonym for progress. This man was Carl Benz. It is not hard to imagine the looks of amazement on the faces of all those who in 1908 witnessed the first C. Benz Söhne automobiles leaving the production line from what was originally conceived as an engine assembly plant. And how wonderful that this memorial to mobility has now been restored to its former splendour — as the lovingly renovated industrial monument and museum, the Dr. Carl Benz Car Museum. Star exhibits such as the last two C. Benz Söhne vehicles built in Ladenburg and many other classic vehicles from the Benz and Mercedes-Benz brands provide first-hand testimony of our automotive past. A wealth of historic documents and exhibits also help revive memories of the automotive pioneer Carl Benz.

Opening hours.

The museum is open on Wednesday, Saturday and Sunday and on all public holidays from 2 p.m. to 6 p.m. (groups of 15 people or more by appointment)

Address.

Ilvesheimer Straße 26 68526 Ladenburg

Phone: +49 6203-18 17 86

E-Mail: info@automuseum-ladenburg.de

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02] Carl Benz House in Ladenburg



In the large park of his house, which is an original part of the property, Carl Benz had a garage built in the style of an old fortified tower. In 1921 a veranda with a flat roof was built on; a few years later the south side of the house got an extension across the entire gable wall.

In this house Carl Benz accepted the honours that were bestowed on him as automotive pioneer. Members of the Benz Family lived in this house until the year 1968. In 1969 it passed into the hands of the town of Ladenburg. It temporarily served as a restaurant and club house. In 1985 the house was acquired by Daimler-Benz and thoroughly refurbished.

The Benz House serves today as an exhibition documenting the lifework of Carl Benz, which is marked by numerous automotive milestones. Exhibits, documents, personal memorabilia and models from his working life reflect the passion of a man who to the very end remained true to his personal motto: "Inventing is much more agreeable than having already invented."

The Karl-Benz house is also the registered office of the Daimler and Benz Foundation. The foundation was created in 1986 by Daimler-Benz AG (present Daimler AG). It contributes to the future development of society through the provision of scientific findings. In doing so it views itself as promoter of the knowledge society and strives to enhance the reputation of research in public opinion.

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03] Karl Benz Memorial

Description English: Memorial place of the inventor of the automobile

Carl Benz.

Date 7 March 2016, 15:19:07

Source Own work

Author Lionmats

Camera 49° 28′ 59.18″ N, 8° 28′ 42″ E

location



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04] Carl Benz Monument Ladenburg



Image Details

Contributor:

Panther Media GmbH / Alamy Stock Photo

File size:

953.1 KB jpeg

Releases:

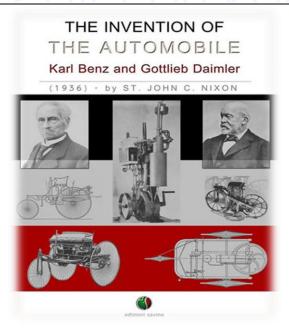
Model - no | Property - no Do I need a release?

Dimensions:

2592 x 1944 px | 21.9 x 16.5 cm | 8.6 x 6.5 inches | 300dpi

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Books by / on Karl Benz



by <u>St. John C. Nixon</u> series <u>History of the Automobile</u>

Synopsis

" ... My excuse for writing this book is a desire to ventilate certain facts in relation to the early work of Karl Benz and Gottlieb Daimler of which the public is largely ignorant. Among those who have taken the trouble to investigate the early days of the motor movement, there is a certain amount of controversy as to who invented the motor vehicle, although this question has not, at the moment, extended to the general public. Inevitably it will do so, if the prevailing interest increases, in which event, it is hoped that this book will prove useful, for all the dates and facts, etc., have been fully authenticated. There are, however, several to whom I must express my sincere gratitude for the assistance they have given me. Herr Rudolf Caracciola, the winner, during the 1935 season of motor racing, of the Grand Prix of France, Belgium, Switzerland, Spain, and Tripoli, to say nothing of other triumphs, and therefore the Champion of Europe, has most kindly written a preface after reading through the manuscript. The Daimler-Benz Aktiengesellschaft of Germany has been indefatigable in providing me with material in regard to certain facts connected with the early experiments of both Benz and Daimler. Mr. Frederick R. Simms, too, has spared no effort to help me with some of the inner details of Daimler's engineering career." (ST. John C. Nixon - September, 1936)

Kindly visit these Web Links to know the BOOKS by/on/about Karl Benz

https://www.goodreads.com/author/list/6865395.Carl_Benz

https://www.amazon.in/Invention-Automobile-Karl-Gottlieb-

Daimler/dp/8899914095

https://archive.org/details/isbn_850781140

https://openlibrary.org/subjects/person:karl_benz_(1844-1929)

https://mercedes-benz-

publicarchive.com/marsClassic/en/instance/ko/Carl-Benz.xhtml?oid=580

https://www.ebay.com/itm/144290655672

https://kids.britannica.com/students/article/Karl-Benz/317353

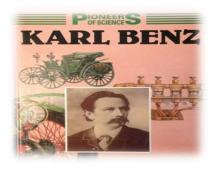
Carl Benz

A Life Dedicated to Cars in Comic Book Form https://emercedesbenz.com/tag/carl-benz/

The Carl Benz comic-book story is based on proven facts accurately depicted with the help of the Mercedes-Benz Classic Archives

The very first comic book, titled "Carl Benz – A life dedicated to cars", covers how the car was invented in colorful images how the car was invented as well as providing an insight into the fascinating life of car creator, Carl Benz. The comic book, by Belgian artist Willy Harold Williamson and author Martin Grünewald, is published by Sadifa Media and will be available from February 9, 2013 in the Mercedes-Benz Museum shop.

"There can be few more entertaining ways of conveying the stories both of the automobile and of the origins of our company", commented Michael Bock, Head of Mercedes-Benz Classic. "The historical accuracy of these wonderful drawings is impressive, while the speech bubbles really get to the heart of the story. Every little technical detail on the Benz Patent Motor Car is precisely drawn; and Carl and Bertha are immediately recognisable".



From the Pioneers of Science series, a picture book biography of Karl Friedrich Benz. Benz was a German engine designer and car engineer, generally regarded as the inventor of the petrol-powered automobile, and together with Bertha Benz, a pioneering founder of the automobile manufacturer Mercedes-Benz.

Kindly visit the Web Link to know about the book

"Karl Benz"

https://www.newworldencyclopedia.org/entry/Karl_Benz

<u>Contents</u> {Please click each Chapter}

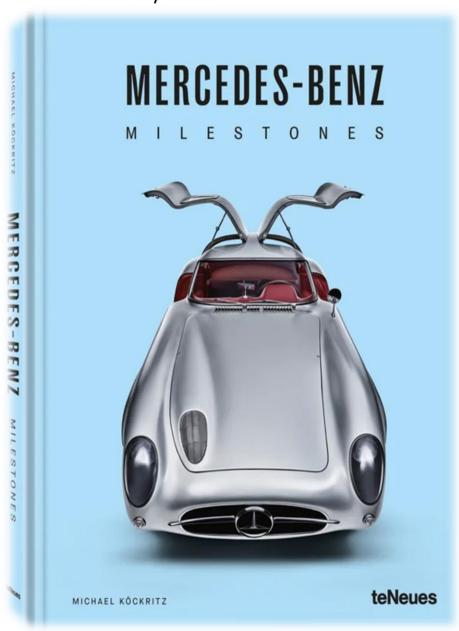
- 1_Early life
- 2_Benz's Factory and his first inventions (1871 to 1882)
- 3_Benz's Gasmotoren-Fabrik Mannheim (1882 to 1883)
- 4_Benz & Cie. and the Motorwagen
- 5_Benz & Cie. expansion
- 6 Benz Söhne (1906 to 1923)
- 7 Toward Daimler-Benz and the Mercedes Benz of 1926
- 8_Legacy
- 9 Notes
- 10 References
- 11 External links
- 12_Credits

And now, we continue with the rapid Milestone series by teNeues, which is delves into the greatest car brands in the world. After Porsche and BMW, this time we explore the automotive history of the Stuttgart flagship brand, Mercedes-Benz.

In the visually stunning coffee table book "Mercedes-Benz Milestones", Michael Köckritz, the editor of the internationally acclaimed automotive culture magazine ramp, takes his readers on a journey through the company's history of the internationally coveted German automaker. He presents the icons of the car brand in a historical overview, arranged chronologically from the company's founding to the present day.

"Mercedes-Benz Milestones" is an exciting journey through the development of the high-end brand. Approximately 40 models from the A-Class, S-Class, E-Class, and G-Class are featured in this high-caliber coffee table book. And of course, classics and vintage cars, as well as powerhouses like the racing models or the tuned AMG models, are not to be missed. Whether it's a luxury sedan, family car, SUV, sports car, or the futuristic EQ series with electric cars, there is room for everything in this comprehensive compendium, as long as it bears the star on the hood.

In addition to impressive images, Köckritz has also peppered the book with informative texts and intriguing background stories about each vehicle. For every Mercedes-Benz fan, "Mercedes-Benz Milestones" is the ultimate guide with all the essential facts about the luxury brand.



A COMPREHENSIVE HISTORY OF

Mercedes-Venz

https://www.premiumcomponents.info/blog/History-of-Mercedes-Benz?



Premium Automotive Components

What is it about Mercedes-Benz that has captured the hearts and minds of car enthusiasts worldwide? How did this automotive giant emerge as a leading force in the industry, setting the standard for luxury, performance, and innovation? In this journey through the comprehensive history of Mercedes-Benz, we will delve into the origins of the brand, the vision of its founding fathers, and the pioneering models and innovations that have shaped not just the company but the automotive industry as a whole.

The story of Mercedes-Benz is one of determination, ambition, and a relentless pursuit of excellence. Behind the iconic three-pointed star logo lies a rich history of ground breaking achievements and a proud legacy that continues to inspire the brand today. From its humble beginnings with the invention of the internal combustion engine to its present-day status as a luxury automotive powerhouse, the history of Mercedes-Benz is a testament to the power of innovation and the indomitable spirit of its founders.

Join us as we explore the incredible story of Mercedes-Benz, uncovering the milestones that have defined this legendary brand. We'll shed light on the lives and works of its founding fathers, Karl Benz and Gottlieb Daimler, the birth of the Mercedes-Benz brand, and the company's significant contributions to motorsports. We'll also examine its technological advancements, environmental efforts, and the enduring legacy of this iconic brand that continues to drive the automotive industry forward.

Short Summary

 Karl Benz and Gottlieb Daimler are the founding fathers of Mercedes-Benz, established in 1926.

- The brand has pioneered models and innovations such as the iconic Benz Patent Motor Car, 260D Model for fuel efficiency and environmental sustainability, Silver Arrows to shape motorsports history.
- Mercedes-Benz is renowned globally for its technological advancements, environmental efforts & commitment to quality & performance.

The Founding Fathers: Karl Benz and Gottlieb Daimler

At the heart of the Mercedes-Benz story are two innovative engineers who, despite working independently, shared a common vision for the future of the automobile: Karl Benz and Gottlieb Daimler. These brilliant minds laid the foundation for a company that would revolutionize the automotive industry with the invention of the internal combustion engine.

Their respective companies would later join forces to create the Daimler-Benz AG, the birthplace of the Mercedes-Benz brand we know today.

Karl Benz

Karl Benz, a German engineer and inventor, is credited with creating the first automobile and founding multiple companies throughout his career. His initial company, Carl Benz and August Ritter, Engineering Workshop, eventually evolved into the Daimler-Benz AG company. Driven by his passion for innovation, Benz established the Mannheim Gas Engine Factory (Benz & Cie. Rheinische Gasmotoren-Fabrik Mannheim) in 1883, where he focused on producing stationary and vehicle engines.

The Benz Motor Velocipede, often referred to as the "Velo," was the first automobile produced by Benz & Cie. It marked a milestone in the history of automotive production, being the first car to be mass-produced. This ground breaking four-wheel motorized two-seater revolutionized the Mercedes-Benz cars industry with its lightweight design and cost-effectiveness. The Velocipede's success, with approximately 1,200 models sold, cemented Benz's reputation as a pioneer in the automotive industry.

Gottlieb Daimler

Gottlieb Daimler, an engineer with a keen interest in technology, shared a similar vision with Bertha Benz and was particularly captivated by the potential of the internal combustion engine. In 1882, Daimler appointed Wilhelm Maybach as his technical assistant, marking the beginning of a fruitful partnership that would lay the groundwork for the Daimler car.

Together, Daimler and Maybach co-founded Daimler-Motoren-Gesellschaft (DMG), a company that would later play a significant role in the development of the Mercedes-Benz brand. However, discord arose between the partners of DMG, as Max Duttenhofer wanted to focus on stationary engines, while Daimler and Maybach were determined to concentrate on vehicle production.

The Birth of Mercedes-Benz Brand

The Mercedes-Benz brand as we know it today was established in 1926, following the merger of Karl Benz and Gottlieb Daimler's companies into the Daimler-Benz company. The first Mercedes automobile was marketed in 1901 by DMG, thanks to the efforts of Emil Jellinek, a successful trader with significant involvement in the automotive industry. Over the years, the Mercedes-Benz brand has expanded its range of models catering to various segments of the market, from the entry-level A-Class up to the luxurious S-Class.

Jellinek's keen interest in powerful and fast vehicles led him to request DMG to manufacture these for him. His racing success under the pseudonym of his daughter's first name, Mercedes, caused the name to become renowned in motoring circles in the late 1890s. This marked the beginning of a new era for the company, as the Mercedes name became synonymous with luxury, performance, and innovation.

Today, the Mercedes-Benz brand continues to push the boundaries of automotive excellence, producing a diverse range of vehicles that cater to various segments of the market. With a steadfast commitment to innovation, quality, and performance, the legacy of Karl Benz and Gottlieb Daimler lives on in every Mercedes-Benz vehicle that graces the road.

<u>Pioneering Models and Innovations</u>

Throughout its history, Mercedes-Benz has been responsible for several pioneering models and innovations that have significantly influenced the development of the automotive industry. These groundbreaking achievements have set the stage for the company's continued success, as it remains at the forefront of automotive technology and design.

Mercedes-Benz has consistently pushed the boundaries of what is possible in the automotive industry, especially with their line of Mercedes-Benz vehicles, including their range of Mercedes cars.

Our skillset here at Premium Components is in supplying <u>Mercedes Benz bumpers</u>. Mercedes-Benz car bumpers epitomise a harmonious blend of style, functionality, and advanced engineering. Crafted with meticulous attention to detail, these bumpers not only enhance the vehicle's aesthetic appeal but also serve as a crucial line of defence against potential impacts. Employing a combination of high-quality materials and innovative design, Mercedes-Benz bumpers are adept at absorbing and dispersing energy during collisions, thereby safeguarding both the car's occupants and its structural integrity. Whether seamlessly integrated into the overall design or featuring bold accents, these bumpers reflect the brand's commitment to luxury and safety, exemplifying the brand's legacy of producing vehicles that excel in both form and function.

Benz Patent Motor Car

The Benz Patent Motor Car, patented by Carl Benz in 1886, was the first vehicle to incorporate an internal combustion engine and electric ignition. This innovative design combined engine, chassis, and drive components in a single unit, setting the foundation for the modern automobile. The vehicle utilized rear-wheel drive and a single front wheel for steering, with a toothed rack and crank to rotate. Its internal combustion engine was equipped with a crankshaft with counterweights, electric ignition, and water cooling.

This groundbreaking invention by Karl Benz, the Benz Patent Motorwagen, not only marked the beginning of the automobile era but also paved the way for the development of countless innovations and advancements in the automotive industry. The Benz Patent Motor Car remains an iconic symbol of Mercedes-Benz's commitment to innovation and excellence.

260 D Model

The introduction of the Mercedes-Benz 260 D Model in 1936 marked another significant milestone in the history of the brand. As the world's first series-production diesel-powered passenger car, the 260 D Model revolutionized the car industry with its impressive fuel consumption of just 9.5 liters.

This innovative vehicle demonstrated Mercedes-Benz's dedication to developing fuel-efficient and environmentally-friendly technologies, a commitment that continues to drive the brand's research and development efforts today.

Silver Arrows

Mercedes' motor racing success began in 1934 with the W 25's victory at the Eifel race. The legend of the Silver Arrows was born after the team removed its white paint, revealing the glistening silver aluminum body beneath. This iconic racing car became synonymous with Mercedes-Benz and motorsport, representing a symbol of excellence and innovation that has shaped the history of motorsport and inspired generations of racing enthusiasts.

The Silver Arrows have become a symbol of excellence and innovation in motorsport, and have been a symbol of excellence and innovation in motorsport.

Mercedes-Benz in Motorsports

The storied history of Mercedes-Benz in motorsports has played a crucial role in shaping the brand's identity and reputation. From sports car racing and rallying to Formula One and Formula E, the company's commitment to excellence and innovation has propelled them to the forefront of the racing world. The iconic Silver Arrows, along with the brand's numerous other racing achievements, have solidified Mercedes-Benz's position as a dominant force in motorsports.

Throughout its history, Mercedes-Benz has been synonymous with racing success, both on and off the track. The company's involvement in motorsports dates back to its earliest days, even before the merger of Mercedes and Benz, achieving success at prestigious events such as the Mille Miglia and the Paris-Rouen. The legacy of the Silver Arrows continues to inspire and shape the brand's racing endeavors today, as Mercedes-Benz remains a force to be reckoned with in Formula One and other racing disciplines.

The rich history of Mercedes-Benz in motorsports not only underscores the brand's commitment to excellence and innovation, but also serves as a testament to the indomitable spirit of its founding fathers. The relentless pursuit of performance, both on the racetrack and on the road, has driven the company to continually push the boundaries of automotive technology and design, earning the brand a reputation for unparalleled quality and durability.

Subsidiaries and Alliances

As the Mercedes-Benz brand has grown and evolved over the years, the company has formed various subsidiaries and alliances to further expand its reach and expertise. Mercedes Benz AG, the parent company, has enabled the brand to maintain its position as a leader in the automotive industry, producing a diverse range of vehicles and technologies that cater to various market segments. Mercedes-AMG GmbH, for example, is the in-house performance-tuning division of Mercedes-Benz, launched in 1967. Originally established as a racing engine manufacturer, Mercedes-AMG has since broadened its focus to include the development of custom road cars based on Mercedes vehicles, as well as a range of upgrade and accessory packages. Another notable subsidiary is Mercedes-Maybach, a luxury division that has produced high-end vehicles such as the Maybach 57 and 62, and more recently, the Mercedes-Maybach 5600. In addition to its subsidiaries, Mercedes-Benz has also formed strategic alliances with other automotive companies and brands, such as its partnerships in China. These collaborations have allowed the brand to extend its reach and influence, further solidifying its position as a global automotive powerhouse.

Technological Advancements and Environmental Efforts

Mercedes-Benz's commitment to innovation and environmental sustainability is evident in the numerous technological advancements and groundbreaking vehicles the brand has introduced over the years. From alternative propulsion systems to electric cars and robot cars, Mercedes-Benz continually pushes the boundaries of what is possible in the automotive industry.

Some examples of alternative propulsion vehicles offered by Mercedes-Benz include hybrid-electric, fully electric, and fuel-cell powertrains. As part of its dedication to environmental sustainability, Daimler, the parent company of Mercedes-Benz, has set an ambitious goal to invest \$11 billion by 2022 to ensure that every Mercedes-Benz model has a fully electric or hybrid version available on the market. This

commitment to eco-friendly technologies extends to the company's fuel cell vehicles, such as the F-Cell, which boast an impressive range of 250 miles.

As the automotive industry continues to evolve, Mercedes-Benz remains at the forefront of technological advancements and environmental efforts. The brand's innovative spirit and dedication to sustainability are a testament to the vision and legacy of its founding fathers, as well as its enduring commitment to shaping the future of mobility.

The Legacy of Mercedes-Benz

The global presence and continued success of Mercedes-Benz can be attributed to the legacy of Carl Benz and Gottlieb Daimler's vision for the automobile. With a steadfast commitment to innovation, quality, and performance, the brand has established itself as a leading force in the automotive industry, producing high-quality, cutting-edge vehicles that embody the essence of luxury and engineering excellence.

From its humble beginnings with the invention of the internal combustion engine to its present-day status as a luxury automotive powerhouse, the history of Mercedes-Benz serves as an inspiration for future generations of engineers, designers, and automotive enthusiasts. The brand's enduring commitment to excellence has earned it a reputation for unparalleled quality and durability, as well as a loyal and passionate fan base that spans the globe.

As we look to the future, the legacy of Mercedes-Benz will undoubtedly continue to shape the automotive landscape, driving the industry forward with new innovations and cutting-edge technologies. The iconic three-pointed star logo will remain a symbol of excellence, luxury, and performance, as the brand continues its relentless pursuit of automotive perfection.

Summary

In this exploration of the comprehensive history of Mercedes-Benz, we have uncovered the incredible story of the brand's origins, its founding fathers, and the groundbreaking innovations that have shaped not just the company but the automotive industry as a whole. From the invention of the internal combustion engine to the development of the first diesel passenger car, the history of Mercedes-Benz is a testament to the power of innovation and the indomitable spirit of its founders.

The brand's commitment to excellence and innovation has driven it to continually push the boundaries of automotive technology and design, earning it a reputation for unparalleled quality and durability. As we look to the future, the legacy of Mercedes-Benz will undoubtedly continue to inspire and shape the automotive landscape, driving the industry forward with new innovations and cutting-edge technologies.

As we celebrate the remarkable achievements and enduring legacy of Mercedes-Benz, let the brand's story serve as a reminder of the power of innovation, the importance of perseverance, and the unlimited potential of human ingenuity. The

spirit of Karl Benz and Gottlieb Daimler lives on in every Mercedes-Benz vehicle that graces the road, and their vision for the automobile will continue to shape the future of the industry for generations to come.

Frequently Asked Questions

What is the brief summary of Mercedes-Benz?

Mercedes-Benz traces its origins to Karl Benz and Gottlieb Daimler's invention of the first internal combustion engine in a car in 1886. By 1900, Benz & Cie was the world's largest automaker and the first models to bear the Mercedes name were produced in 1901.

Today, Mercedes-Benz is renowned for developing, manufacturing and distributing premium and luxury cars and vans, offering various services such as financing, leasing, car rental, fleet management and innovative mobility services.

Why was it called Mercedes-Benz?

Mercedes-Benz gets its name from Emil Jellinek, a businessman and motor enthusiast who entered the French Riviera's 'Speed Week' in 1899 under the pseudonym 'Mercedes', which was his daughter's name, meaning "mercies".

In 1902, the company went on to trademark the name and have the Mercedes-Benz name attached to its car line.

Where is the origin of Mercedes-Benz?

Mercedes-Benz originates from Stuttgart, Germany, as part of the Daimler Motoren Gesellschaft (DMG) founded in 1890.

Carl Benz and Max Kaspar Rose collaborated in October 1883 to form the company.

Why is Mercedes so famous?

Mercedes is renowned for its superior quality, reliability and performance, as well as its iconic designs. These features make it a leader in the luxury car market, with its variety and functionality providing customers with amazing options.

The brand has been around for over a century, and its commitment to excellence has made it a household name. Mercedes cars are known for their luxurious interiors, powerful engines, and advanced technology.

What invention is attributed to Karl Benz and Gottlieb Daimler?

Karl Benz and Gottlieb Daimler are credited with the invention of the internal combustion engine, which would go on to form the basis of Mercedes-Benz vehicles.

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MWM History

https://www.mwm.net/en/about-mwm/

Motoren-Werke Mannheim: A German company that develops and produces gas engines and gensets.

MWM was founded in 1879 by German engineer Carl Benz.

The company is now part of Caterpillar Energy Solutions GmbH



Carl Benz, founder of the company

Future Needs Tradition.

MWM can look back on a tradition 150 years old, always guided by a mindset of innovation. The foundation of the "Mechanische Werkstätte" (Mechanical Workshop) by automobile pioneer Carl Benz in Mannheim in 1871 marked the dawn of the era of gas engines and the start of MWM. The enthusiasm and innovative drive of engineers from more than a dozen decades have continued to yield new developments and contributed to MWM becoming what it is today, one of the leading and most renowned brands in the field of gas engines and gensets. Today, some 1,400 employees work at the Mannheim plant and other MWM locations. MWM thus continued to improve the output rating, efficiency and reliability of its systems, distributed from Mannheim throughout the globe today.

150 Years of Engine Building in Mannheim

In 2021, MWM celebrated its 150th anniversary. To review the major milestones in the company's history, various projects and campaigns were conducted on site in Mannheim for active and former MWM employees, customers, and distributors as part of the anniversary marketing campaign.

100 Years MWM Brand

In 2022, MWM celebrated its 100th brand anniversary. To draw attention to this special event in the company's history, an anniversary website has been released with historical

milestones, personal moments of MWM employees, customers, and distributors, and a monthly brand quiz.

Origin of the Traditional Brand

In 1922, Benz & Cie. sold its Stationary Engine Building department. After the sale was finalized under a spin-off agreement, the stationary engine production became independent from Benz & Cie. on April 22, 1922 and started operating under the name "Motoren-Werke Mannheim A.-G. vorm. Benz, Abt. stationärer Motorenbau". A year later, on January 22, 1923, "Motoren-Werke Mannheim A.-G." applied to the Imperial Patent Office for registration of the trademark—the first official MWM trademark.

Historic Moments and Key People Behind the MWM Brand

Under the motto "150 years of continuous innovation", noteworthy historic moments, developments, and key people behind the MWM brand were introduced in weekly posts in the MWM LinkedIn and Facebook channels. The online community of the MWM social media channels especially liked the photographs and pictures of the old MWM engines, portable engines, and motorized horses.

Milestones in MWM History

The MWM brand looks back on a tradition of 150 years full of innovation.

1871

Automobile inventor Carl Benz founds his "Mechanical Workshop" in Mannheim, thereby laying the basis for Benz&Cie., which later becomes MWM.

1879

Successful continuous operation of the inventor's first two-stroke gas engine.

1883

Serial production of the two-stroke gas engines

1886

The motorized car patented under DRP no. 37435 is built at the new site in Mannheim-Neckarstadt.

1910

Production launch of two-stroke diesel engines for submarines

• 1911

The new diesel procedure without compressor is patented under DRP no. 230517 and in 1919 under DRP no. 397142. The pioneer patents enable the construction of small, fast-running diesel engines.

• 1922

Benz&Cie. sells the Stationary Engine Building department

Establishment of the company with entry in the Commercial Register on April 1, 1922 and sealing of the independence of "Motoren-Werke Mannheim A.-G. vorm. Benz, Abt. stationärer Motorenbau" under a spin-off agreement on April 22, 1922.

• 1923

Official registration of the protected MWM trademark with the Imperial Patent Office on January 22, 1923.

1926

Knorr-Bremse AG in Berlin and "Süddeutsche Bremsen AG" (SB) in Munich acquire the shares of MWM. Henceforth, MWM is a subsidiary of "Süddeutsche Bremsen AG" (SB), Munich.

• 1932

Development of small diesel engines (KD15 E und KD15 Z) for industrial and agricultural applications.

1938

First medium-speed diesel engine with turbo charging (TRH1345) and $1,400\ \text{hp}$ at $600\ \text{rpm}$

• 1943-1945

Up to 70 percent of the factories destroyed, production moved out to various locations

• 1946

First new design of an RH engine (RH348) and production launch of small diesel engines for tractors

• 1953

First production of small air-cooled diesel engines with patented MWM equal-pressure pre-chamber method

• 1954

100,000 small diesel engines built since 1946 and supplied to numerous tractor and construction machinery manufacturers

• 1972

MWM celebrates its 50th brand anniversary.

• 1979

MWM celebrates "100 Years of Engine Building in Mannheim".

1985

Klöckner-Humboldt-Deutz AG (KHD), Cologne, acquires the majority of the shares of MWM in Mannheim and Südbremse in Munich.

• 1989-1991

MWM takes over the large engine production of Klöckner-Humboldt-Deutz AG (KHD) (528/628 and 540/640 series) in Mannheim.

• 1992

MWM receives an order for the design and production of prototypes of an electronically controlled 6,000-hp locomotive engine. This engine is the forerunner of the current TCG 2032 gas engines.

• 1999

MWM is sold to Deutz AG for DM 34.3 million. The operational business for the engine division passes to Deutz AG, the production of small diesel engines is discontinued at MWM.

2005

Deutz AG founds the independent subsidiary Deutz Power Systems.

• 2007-2008

Sale to the financial investor 3i and re-branding to MWM GmbH

• 2011-2013

MWM GmbH becomes part of Caterpillar Inc., MWM GmbH becomes Caterpillar Energy Solutions GmbH.

• 2018-2019

Presentation of TCG 3016 and 3020 V20, which were designed from scratch

2021

Presentation of the digital monitoring system MWM Remote Asset Monitoring (RAM) for location-independent and transparent monitoring of CHP plants in real time. MWM celebrates its 150^{th} anniversary - 150 years of continuous innovation. Launch of the TCG 3020 V12 and the V16 as completion of the TCG 3020 series

• 2022

Introduction of the SCR (selective catalytic reduction) catalyst retrofit kit as a compact turn-key solution for gas engines to reduce NO_X emissions and to meet the requirements of the 44^{th} BImSchV. On the occasion of the foundation of "Motoren-Werke Mannheim A.-G." in 1922, MWM celebrates the anniversary "100 Years of the MWM Brand".

• 2023

100 years after the registration of the MWM trademark on January 22, 1923, the anniversary campaign starts with 100 moments and milestones, 100 quiz questions and other activities about the company and brand history of MWM.













